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PATENT

Attorney Docket No.: 28049/34394

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Applicants: Lu et al.

Serial No.: 09/076,517

For: "AUDIENCE
MEASUREMENT SYSTEM FOR
DIGITAL TELEVISION"


Filed: May 12, 1998

Group Art Unit: **2611**
~~2711~~

Examiner: Unknown

) I hereby certify that this paper
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) Paul Del Giudice
) Registration No. 28,788

PETITION TO MAKE SPECIAL UNDER 37 C.F.R. § 1.102

Commissioner for Patents
Washington, D.C. 20231

> ATTN. DIRECTOR'S OFFICE

Dear Sir:

Applicants hereby request that the above-identified new application be granted special status for examination under the provisions of 37 C.F.R. § 1.102 and M.P.E.P. § 708.02 (VIII). This application has not yet received any examination by the Examiner.

The \$130 petition fee, set forth in 37 C.F.R. § 1.17(h) is enclosed, as required by M.P.E.P. § 708.02 (VIII) (A). Any additional required fee may be

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charged to Deposit Account No. 13-2855.

130.00

Should the Office determine that all the claims are not directed to a single invention, the applicants will make an election without traverse in order to be granted special status.

A pre-examination search was made, as required by M.P.E.P. § 708.02

(VIII) (C). The following areas were searched:

- (1) class 725, subclasses 9-20; and
- (2) class 455, subclass 2.

The art developed in the search and/or already known to the applicants is listed below:

U.S. Patent Documents

<u>Document Number</u>	<u>Issue Date</u>	<u>Name</u>	<u>Class</u>	<u>Subclass</u>
4,547,804	10/15/1985	Greenberg	358	142
4,647,974	03/03/1987	Butler et al.	358	185
4,677,466	06/30/1987	Lert, Jr. et al.	358	84
4,697,209	09/29/1987	Kiewit et al.	358	84
4,718,106	01/05/1988	Weinblatt	455	2
4,816,904	03/28/1989	McKenna et al.	358	84
4,858,000	08/15/1989	Lu	358	84
4,955,070	09/04/1990	Welsh et al.	455	2
4,972,503	11/20/1990	Zurlinden	455	2
5,019,899	05/28/1991	Boles et al.	358	84
5,113,437	05/12/1992	Best et al.	380	3
5,155,762	10/13/1992	Croquet et al.	379	92
5,200,822	04/06/1993	Bronfin et al.	358	142

5,251,324	10/05/1993	McMullan, Jr.	455	2
5,278,988	01/11/1994	Dejean et al.	455	2
5,319,453	06/07/1994	Copriviza et al.	348	6
5,373,315	12/13/1994	Dufresne et al.	348	2
5,404,160	04/04/1995	Schober et al.	348	1
5,404,377	04/04/1995	Moses	375	200
5,425,100	06/13/1995	Thomas et al.	380	20
5,436,653	07/25/1995	Ellis et al.	348	2
5,437,050	07/25/1995	Lamb et al.	455	2
5,450,122	09/12/1995	Keene	348	1
5,450,490	09/12/1995	Jensen et al.	380	6
5,481,294	01/02/1996	Thomas et al.	348	1
5,485,518	01/16/1996	Hunter et al.	380	20
5,488,408	01/30/1996	Maduzia et al.	348	2
5,490,060	02/16/1996	Malec et al.	364	401
5,495,282	02/27/1996	Mostafa et al.	348	5
5,497,185	03/05/1996	Dufresne et al.	348	2
5,504,518	04/02/1996	Ellis et al.	348	2
5,512,933	04/30/1996	Wheatley et al.	348	5
5,526,427	06/11/1996	Thomas et al.	380	20
5,532,732	07/02/1996	Yuen et al.	348	1
5,559,549	09/24/1996	Hendricks et al.	348	6
5,572,246	11/05/1996	Ellis et al.	348	2
5,574,962	11/12/1996	Fardeau et al.	455	2
5,581,800	12/03/1996	Fardeau et al.	455	2
5,594,934	01/14/1997	Lu et al.	455	2
5,600,364	02/04/1997	Hendricks et al.	348	1
5,608,445	03/04/1997	Mischler	348	4

5,612,729	03/18/1997	Ellis et al.	348	2
5,621,454	04/15/1997	Ellis et al.	348	2
5,629,739	05/13/1997	Dougherty	348	486
5,646,675	07/08/1997	Copriviza et al.	348	1
5,654,748	08/05/1997	Matthews, III	348	13
5,659,350	08/19/1997	Hendricks et al.	348	6
5,726,701	03/10/1998	Needham	348	2
5,737,025	04/07/1998	Dougherty et al.	348	473
5,757,414	05/26/1998	Thorne	348	1
5,771,307	06/23/1998	Lu et al.	382	116
5,798,785	08/25/1998	Hendricks et al.	348	1
5,819,156	10/06/1998	Belmont	455	2
5,842,010	11/24/1998	Jain et al.	395	675
5,848,396	12/08/1998	Gerace	705	10
5,857,190	01/05/1998	Brown	707	10
5,872,588	02/16/1999	Aras et al.	348	1
5,880,789	03/09/1999	Inaba	348	564
5,881,360	03/09/1999	Fong	455	2
5,973,750	10/26/1999	Ogawa et al.	348	570
5,974,299	10/26/1999	Massetti	455	2
6,085,066	07/04/2000	Fong	455	2
6,112,053	08/29/2000	Dunki-Jacobs et al.	455	2
6,124,877	09/26/2000	Schmidt	348	2
6,130,726	10/10/2000	Darbee et al.	348	734
6,160,570	12/12/2000	Sitnik	348	1
6,184,918 B1	02/06/2001	Gioldschmidt Iki et al.	348	1
6,202,210 B1	03/13/2001	Ludtke	725	20

Foreign Patent Documents

<u>Document Number</u>	<u>Publication Date</u>	<u>Country</u>	<u>Class</u>	<u>Subclass</u>
WO 91/11062	07/25/1991	PCT	H04B H04H	17/00 9/00
WO 94/11989	05/26/1994	PCT	H04N	5/76
WO 95/15653	06/08/1995	PCT	H04N	7/14
WO 99/62260	12/02/1999	PCT	H04N	7/16

As required by M.P.E.P. § 708.02 (VIII) (D), many of these references are being made of record in the application by the filing of an information disclosure statement concurrently herewith. One copy of each of the references listed in the information disclosure statement is attached hereto for the convenience of the officer reviewing this petition. The remaining references have already been filed in previously submitted information disclosure statements.

The claimed subject matter is patentable over the above-identified references. For example, none of the references disclose or suggest a television audience measurement system for identifying a viewer selected television program from among a plurality of television programs simultaneously broadcast in a broadcast channel, comprising a channel detector that detects the broadcast channel in which the plurality of television programs is broadcast; and a comparator that sequentially compares an audio component of the plurality of television programs broadcast in the detected broadcast channel with an audio signal of the viewer selected program so as to identify the viewer selected

television program. Nor do the above-identified references disclose or suggest an audience measurement system for digital television equipment, wherein the digital television equipment is disposed in a statistically selected location, comprising a software agent adapted to read, from a data packet contained in digital television programming, a datum identifying a television program, wherein the software agent is stored in memory associated with the digital television; and an interface and communication apparatus adapted to transmit the identification datum to a remotely located central office. Moreover, none of the references disclose or suggest an audience rating and/or recording system, comprising the steps of extracting at least one identification code for at least one digital stream of a first channel, from a control stream of a multiplexed digital transmission, when reception of the first channel begins; recording the at least one identification code extracted and the time when reception of the first channel begins; extracting at least one identification code for at least one digital stream of any subsequent channel, from the control stream of the multiplexed digital transmission, when reception of the subsequent channel begins; and recording at least one identification code extracted and the time when reception of the subsequent channel begins.

Greenberg, U.S. Patent No. 4,547,804, discloses inserting a program identification code on a preselected scanning line of the video broadcast. See e.g., Greenberg, col. 3, line 49 to col. 4, line 5. Greenberg does not disclose, among other things, identifying a program from among a plurality of programs

simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Butler et al., U.S. Patent No. 4,647,974, disclose inserting program identification information into the video signal of a broadcast. See e.g., Butler et al., col. 2, line 64 to col. 3, line 6. Butler et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Lert, Jr. et al., U.S. Patent No. 4,677,466, disclose a method and apparatus for extracting a characteristic feature signature (or characteristic feature signature set) from a video and/or audio portion of a broadcast program selected for viewing, and for comparing the signature (or signature set) with corresponding reference signatures to identify the program. See e.g., Lert, Jr. et al., col. 3, line 37 to col. 4, line 12. Lert, Jr. et al. do not explicitly disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Kiewit et al., U.S. Patent No. 4,697,209, disclose a method and apparatus for detecting predetermined events within a video broadcast program, extracting a signature from the video broadcast program, and comparing the captured signature with reference signatures to identify the program. See e.g., Kiewit et al., col. 4, line 47 to col. 5, line 45. Kiewit et al. do not explicitly disclose, among other things, identifying a program from among a plurality of programs

simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Weinblatt, U.S. Patent No. 4,718,106, discloses a method and apparatus for detecting station identification codes in a radio broadcast to determine what radio station a listener is tuned to. See e.g., Weinblatt, col. 3, line 24 to col. 4, line 8. The radio broadcast is within the AM or FM band. (Col. 2, lines 46-53). Weinblatt does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

McKenna et al., U.S. Patent No. 4,816,904, disclose a data collection unit attached to a television receiver which is capable of detecting channel changes and transmitting the information to a central controller. See e.g., McKenna et al., col. 5, lines 26-47. A prompting message is displayed on a television screen overlaid on the program being viewed by mixing the prompting message with the video signal. (Col. 8, line 65 to col. 9, line 12). McKenna et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Lu, U.S. Patent No. 4,858,000, discloses a method and system for passively identifying audience members using image recognition techniques. See e.g., Lu '000, col. 2, lines 20-38. Lu '000 does not explicitly disclose, among other things, identifying a program from among a plurality of programs

simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Welsh et al., U.S. Patent No. 4,955,070, disclose an apparatus and method for comparing an audio frequency with a tuner output signal to obtain a match. See e.g., Welsh et al., col. 1, lines 45-59. The broadcast signal is of the analog broadcast approach. (Col. 5, lines 13-23). Welsh et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Zurlinden, U.S. Patent No. 4,972,503, discloses a method and apparatus for determining the selected channel on a receiver by detecting a channel selection when input by a viewer from a remote transmitter. See e.g., Zurlinden, col. 2, lines 31-64. Zurlinden does not explicitly disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Boles et al., U.S. Patent No. 5,019,899, disclose an apparatus and method for comparing and matching predetermined digitized video signatures with digitized video signatures selected from a broadcast. See e.g., Boles et al., col. 7, line 61 to col. 8, line 22. Boles et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Best et al., U.S. Patent No. 5,113,437, disclose encoding an audio signal with an identification code using notch encoding methods. See e.g., Best et al., col. 1, lines 42-55. Best et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Croquet et al., U.S. Patent No. 5,155,762, disclose a method and system that collects information regarding channel selection and automatically transmits that information via a modem to a central processing unit. See e.g., Croquet et al., col. 3, line 65 to col. 4, line 35. Croquet et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Bronfin et al., U.S. Patent No. 5,200,822, disclose an apparatus and method for program identification using video encoding within the active video component of a television signal. See e.g., Bronfin et al., col. 2, lines 37-51. Bronfin et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

McMullan, Jr., U.S. Patent No. 5,251,324, discloses a method and apparatus for generating and collecting viewing statistics by using a set top box to determine the channel being viewed. See e.g., McMullan, Jr., col. 5, line 35 to col. 6, line 24. McMullan, Jr. does not disclose, among other things, identifying a program from among a plurality of programs simultaneously

broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Dejean et al., U.S. Patent No. 5,278,988, disclose a method and apparatus for identifying a tuned frequency of a receiver and comparing the tuned frequency to a set of stored frequencies associated with a particular station. See e.g., Dejean et al., col. 1, lines 39-56. Dejean et al. do not explicitly disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Copriviza et al., U.S. Patent No. 5,319,453, disclose a method and apparatus that encodes digital codes on a video signal and detects those codes at a receiver. See e.g., Copriviza et al., col. 11, lines 28-57. Copriviza et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Dufresne et al., U.S. Patent No. 5,373,315, disclose a method and apparatus that prompts a viewer to input identification information and associates the user identification with the channel being viewed as determined by a remote control signal receiving tuner when a channel is selected by the user. See e.g., Dufresne et al. '315, col. 2, lines 47 to 58 and col. 5, lines 33-40. Dufresne et al. '315 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Schober et al., U.S. Patent No. 5,404,160, disclose a method of encoding identification data in a television program signal by modulating the illumination level of certain lines in the video. See e.g., Schober et al., col. 3, line 55 to col. 4, line 19. Schober et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Moses, U.S. Patent No. 5,404,377, discloses audio signal encoding by detecting threshold perceptual entropy envelopes in the audio signal of an audio communications channel and inserting an ancillary code in the envelope so as to mask the code to human perception. See e.g., Moses, col. 5, line 35 to col. 6, line 15. Moses does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Thomas et al., U.S. Patent No. 5,425,100, disclose a universal broadcast code (UBC) that is used to encode programs, and which is detected and decoded by a receiver. See e.g., Thomas et al. '100, col. 2, line 63 to col. 3, line 42; and col. 4, line 60 to col. 5, line 5. Thomas et al. '100 do not explicitly disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Ellis et al., U.S. Patent No. 5,436,653, disclose a method and system that detects predetermined signal events in a broadcast audio signal and/or a broadcast video signal to trigger signature extraction from the broadcast, and identifies the

broadcast by correlating the program signature of a broadcast channel with a signature maintained in a library database of signatures. See e.g., Ellis et al. '653, col. 10, line 58 to col. 11, line 27. Ellis et al. '653 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Lamb et al., U.S. Patent No. 5,437,050, disclose a method and apparatus for identifying a broadcast utilizing signature correlation whereby a program signal undergoes an analog-to-digital conversion and frequency analysis to determine a program signature. See e.g., Lamb et al., col. 3, lines 34-64. Lamb et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Keene, U.S. Patent No. 5,450,122, discloses encoding television programs with a digital identification code on a selected video scan line. See e.g., Keene, col. 2, lines 37-64. Keene does not explicitly disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Jensen et al., U.S. Patent No. 5,450,490, disclose an apparatus and method for encoding and decoding analog audio signals by modulating selected frequency components within the audio signal based on multiple masking evaluations. See e.g., Jensen et al., col. 6, line 59 to col. 7, line 26; and col. 19, line 32 to col. 20,

line 23. Jensen et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Thomas et al., U.S. Patent No. 5,481,294, disclose a system that detects programs based on ancillary codes or program signatures which may be associated with predetermined program identification. See e.g., Thomas et al. '294, col. 4, lines 47-67. Thomas et al. '294 do not explicitly disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Hunter et al., U.S. Patent No. 5,485,518, disclose a method and apparatus for identifying media programs based on video and/or audio signal recognition, and for blocking out all channels and programs that have not been pre-approved for viewing. See e.g., Hunter et al., col. 3, lines 27-36 and col. 4, lines 1-10. Hunter et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Maduzia et al., U.S. Patent No. 5,488,408, disclose a device for channel detection of a microprocessor-controlled receiver incorporating a serial data communications bus by monitoring traffic on the bus. See e.g., Maduzia et al., col. 2, line 50 to col. 3, line 26. Maduzia et al. do not explicitly disclose, among other things, identifying a program from among a plurality of programs

simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Malec et al., U.S. Patent No. 5,490,060, disclose a data collection system that detects a person's buying habits at a point-of-sale terminal. See e.g., Malec et al., col. 6, lines 53-64. Malec et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Mostafa et al., U.S. Patent No. 5,495,282, disclose a broadcast monitoring system using local signal injection to determine what channel a VCR or a cable converter are tuned. See e.g., Mostafa et al., col. 2, lines 22-41. Mostafa et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Dufresne et al., U.S. Patent No. 5,497,185 (a divisional of Dufresne et al. '315), disclose a method and apparatus that prompts a viewer to input identification information and associates the user identification with the channel being viewed as determined by a remote control signal. See e.g., Dufresne et al. '185, col. 2, lines 46-55 and col. 5, lines 21-41. Dufresne et al. '185, do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Ellis et al., U.S. Patent No. 5,504,518 (a divisional of Ellis et al. '653), disclose a method and system that detects predetermined signal events in a broadcast audio signal and/or a broadcast video signal to trigger signature extraction from the broadcast, and identifies the broadcast by correlating the program signature of a broadcast channel with a signature maintained in a library database of signatures. See e.g., Ellis et al. '518, col. 10, lines 31-65. Ellis et al. '518 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Wheatley et al., U.S. Patent No. 5,512,933, disclose a system and method for extracting a signature from the video portion of the broadcast based on luminance and comparing the extracted signature with reference video signatures. See e.g., Wheatley et al., col. 2, lines 1-14 and col. 3, lines 20-44. Wheatley et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Thomas et al., U.S. Patent No. 5,526,427 (a divisional of Thomas et al. '100), disclose a universal broadcast code (UBC) that is used to encode programs, and which is detected and decoded by a receiver. See e.g., Thomas et al. '427, col. 2, line 63 to col. 3, line 40; and col. 4, lines 52-65. Thomas et al. '427 do not explicitly disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Yuen et al., U.S. Patent No. 5,532,732, disclose an apparatus and method that uses compressed codes within the vertical blanking interval of a program signal to identify the channel and time of day. See e.g., Yuen et al., col. 6, lines 25-52. Yuen et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Hendricks et al., U.S. Patent No. 5,559,549, disclose a cable program digital delivery system between a set top terminal and a cable controller. See e.g., Hendricks et al. '549, col. 2, line 61 to col. 3, line 8. The controller is able to gather viewing information for customized programming and targeting purposes through the set top terminal determining the channel entered by the viewer. (Col. 3, line 52 to col. 4, line 13; and col. 11, lines 13-26). Hendricks et al. '549 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Ellis et al., U.S. Patent No. 5,572,246 (a divisional of Ellis et al. '653), disclose a method and system that detects predetermined signal events in a broadcast audio signal and/or a broadcast video signal to trigger signature extraction from the broadcast, and identifies the broadcast by correlating the program signature of a broadcast channel with a signature maintained in a library database of signatures. See e.g., Ellis et al. '246, col. 10, line 35 to col. 11, line 2. Ellis et al. '246 do not disclose, among other things, identifying a program

from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Fardeau et al., U.S. Patent No. 5,574,962, disclose a method and apparatus for program identification using an audio signal encoded by modulating selected frequency components of the audio signal. See e.g., Fardeau et al. '962, col. 3, lines 23-30. Fardeau et al. '962 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Fardeau et al., U.S. Patent No. 5,581,800 (a divisional of Fardeau et al. '962), disclose a method and apparatus for program identification using an audio signal encoded by modulating selected frequency components of the audio signal. See e.g., Fardeau et al. '800, col. 3, lines 23-30. Fardeau et al. '800 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Lu et al., U.S. Patent No. 5,594,934, disclose a realtime correlation meter that compares digital samples from an output of a receiver to transmitted reference samples. See e.g., Lu et al. '934, col. 3, lines 35-49. Lu et al. '934 do not explicitly disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Hendricks et al., U.S. Patent No. 5,600,364, disclose a network controller for a digital cable headend which monitors and controls set top terminals. See

e.g., Hendricks et al. '364, col. 3, lines 44-59; and col. 4, lines 44-54. The controller receives viewing information gathered by the set top terminal in order to generate viewer-customized programming. (Col. 12, lines 51-64). Hendricks et al. '364 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Mischler, U.S. Patent No. 5,608,445, discloses a method and device that utilizes local injection of a program identification signal superimposed on the video component of the broadcast channel. See e.g., Mischler, col. 1, lines 34-41; and col. 1, line 57 to col. 2, line 2. Mischler does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Ellis et al., U.S. Patent No. 5,612,729 (a divisional of Ellis et al. '653), disclose a method and system that detects predetermined signal events in a broadcast audio signal and/or a broadcast video signal, and identifies a broadcast by correlating the program signature of a broadcast channel with a signature maintained in a library database of signatures. See e.g., Ellis et al. '729, col. 10, lines 31-65. Ellis et al. '729 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Ellis et al., U.S. Patent No. 5,621,454 (a divisional of Ellis et al. '653), disclose a method and system that detects predetermined signal events in a

broadcast audio signal and/or a broadcast video signal, and identifies a broadcast by correlating the program signature of a broadcast channel with a signature maintained in a library database of signatures. See e.g., Ellis et al. '454, col. 10, lines 31-65. Ellis et al. '454 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Dougherty, U.S. Patent No. 5,629,739, discloses a method and apparatus for channel identification by injecting an ancillary identifying code into a low energy portion of the audio spectrum of an NTSC television program signal and detecting this ancillary identifying code. See e.g., Dougherty '739, col. 3, lines 30-48. Dougherty '739 does not explicitly disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Copriviza et al., U.S. Patent No. 5,646,675 (a divisional of Copriviza et al. '435), disclose a method and apparatus that encodes digital codes on a video signal and detects those codes at a receiver. See e.g., Coprivizia et al. '675, col. 11, lines 5-32. Copriviza et al. '675 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Matthews, III, U.S. Patent No. 5,654,748, discloses a system for identifying programs of an interactive viewing system to inform a user of the

program being viewed. See e.g., Matthews, III, col. 1, line 63 to col. 2, line 3. Matthews, III does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Hendricks et al., U.S. Patent No. 5,659,350, disclose an operation center for television entertainment systems that organizes and packages television programs for transmission to consumer homes. The organization and packaging may be based on viewer information data gathered by recording viewer transactions through a set top terminal. See e.g., Hendricks et al. '350, col. 3, line 5 to col. 4, line 2. Hendricks et al. '350 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Needham, U.S. Patent No. 5,726,701, discloses a method and apparatus that polls the responses of audience members of a broadcast program to generate a combined response metric. See e.g., Needham, col. 2, lines 11-25. Needham does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Dougherty et al., U.S. Patent No. 5,737, 025, disclose adding an ancillary code to a video signal in the active video portion using frequency hopping and/or spread spectrum techniques. See e.g., Dougherty et al. '025, col. 4, line 66 to col. 5, line 13; and col. 9, lines 52-62. Dougherty et al. '025 do not explicitly

disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Thorne, U.S. Patent No. 5,757,414, discloses a microprocessor-controlled television receiver. See e.g., Thorne '414, col. 3, lines 26-46. The television receiver is controlled by the microcontroller via digital signals and is not related to digital broadcasts. Thorne '414 does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Lu et al., U.S. Patent No. 5,771,307, disclose a system and method of passively identifying audience members by capturing video images of the viewing audience. See e.g., Lu et al. '307, col. 3, lines 28-43. Lu et al. '307 do not explicitly disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Hendricks et al., U.S. Patent No. 5,798,785, disclose a set top terminal that receives program broadcasts customized or tailored to the viewing audience based on data previously gathered by the set top terminal detecting the channel entered by a viewer. See e.g., Hendricks et al. '785, col. 6, lines 31-52; and col. 10, lines 25-38. Hendricks et al. '785 do not disclose, among other things, identifying a program from among a plurality of programs simultaneously

broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Belmont, U.S. Patent No. 5,819,156, discloses a television/computer device that tracks the channel viewing habits of a user. See e.g., Belmont, col. 3, lines 24-52. Belmont does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Jain et al., U.S. Patent No. 5,842,010, disclose a method of arranging information within a data transmission in order of popularity or based on a user profile. See e.g., Jain et al., col. 6, lines 51-67; col. 7, lines 33-46; and col. 8, lines 21-44. Jain et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Gerace, U.S. Patent No. 5,848,396, discloses selecting and displaying visual images to a computer audience based on user behavioral or psychographic profiles as determined from the user's viewing habits. See e.g., Gerace, col. 2, lines 3-23. Gerace does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Brown, U.S. Patent No. 5,857,190, discloses an interactive television system and method that detects audience activity at a user interface unit, such as a television connected to a set top box. See e.g., Brown, col. 2, lines 23-43. Brown does not disclose, among other things, identifying a program from among

a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Aras et al., U.S. Patent No. 5,872,588, disclose a method and apparatus for encoding a universal identification code within an audio-visual broadcast and monitoring viewer behavior based on detection of the identification code. See e.g., Aras et al., col. 7, lines 6-67. The apparatus and method of Aras et al. is intended to be used with interactive television systems or other television systems that provide a return channel to send back collected information. (Col. 4, lines 41-57). Aras et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Inaba, U.S. Patent No. 5,880,789, discloses an apparatus for detecting and decoding multiplexed text transmitted within the video blanking interval. See e.g., Inaba, Figures 2A and 2B; and col. 3, lines 37-52. Inaba does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Fong, U.S. Patent No. 5,881,360, discloses a device for identifying the channel being viewed using audio correlation techniques. See e.g., Fong '360, col. 2, lines 13-32. Fong '360 does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Ogawa et al., U.S. Patent No. 5,973,750, disclose an apparatus for monitoring channel selection by detecting a channel number that is superimposed over the video display. See e.g., Ogawa et al., col. 1, line 64 to col. 2, line 22. Ogawa et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Massetti, U.S. Patent No. 5,974,299, is currently the subject of an interference request submitted by the applicants with respect to the claimed subject matter of the above-identified new application.

Fong, U.S. Patent No. 6,085,066 (a divisional of Fong '360), discloses a device for identifying the channel being viewed using audio correlation techniques. See e.g., Fong '066, col. 2, lines 15-34. Fong '066 does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Dunki-Jacobs et al., U.S. Patent No. 6,112,053, disclose a television monitoring system that correlates audio from a broadcast with locally detectable program sources, and that correlates the broadcast synchronization signal with a source video synchronization signal. See e.g., Dunki-Jacobs et al., col. 2, lines 7-25. Dunki-Jacobs et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Schmidt, U.S. Patent No. 6,124,877, discloses a system for monitoring television programming by picking up intermediate frequencies using an RF probe, and by recovering identification information encoded in the vertical blanking interval of the closed captioning band. See e.g., Schmidt, col. 3, line 65 to col. 4, line 13. Schmidt does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Darbee et al., U.S. Patent No. 6,130,726, disclose a display guide for a remote control that monitors program selection entered into the remote control by a user. See e.g., Darbee et al., col. 2, lines 46-55. Darbee et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Sitnik, U.S. Patent No. 6,160,570, discloses a digital television system which tailors programming, such as advertisements, to a user profile. See e.g., Sitnik, col. 1, line 58 to col. 2, line 34. The user profile may include previously gathered television viewing habits. (Col. 7, line 66 to col. 8, line 18). Sitnik does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Goldschmidt Iki et al., U.S. Patent No. 6,184,918, disclose a method and apparatus for monitoring broadcast viewing habits by detecting a lead tag inserted into the beginning of a program and detecting a tail tag inserted into the end of

the program in order to determine if the program was viewed in its entirety. See e.g., Goldschmidt Iki et al., col. 1, lines 44-50. Goldschmidt Iki et al. further disclose encoding the identification tag into the program in the vertical blanking interval. (Col. 5, lines 5-21). Goldschmidt Iki et al. do not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

Ludtke, U.S. Patent No. 6,202,210, discloses a method and system for collecting viewer information by including identification tags in a broadcast which may be digital cable television programming. See e.g., Ludtke, col. 6, line 19 to col. 7, line 15. Ludtke does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

WO 91/11062 discloses a method and apparatus for scanning the frequency of a broadcast and comparing the scan with a set of samples of various broadcast frequencies within a predetermined band in order to find a match. See e.g., WO 91/11062, page 6, line 13 to page 7, line 9. WO 91/11062 does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

WO 94/11989 discloses a method and apparatus for encoding an audio signal portion of a broadcast with an identification signal by modulating a code signal of a predetermined band width with the identification signal. The audio

signal portion is correlated with a copy of the code signal to recover the identification signal. See e.g., WO 94/11989, page 4, line 37 to page 5, line 17. WO 94/11989 does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

WO 95/15653 discloses an interactive television that compensates for delays in the data signal by comparing a time stamp within the interactive data with a clock at the viewing location. See e.g., WO 95/15653, page 4, line 24 to page 5, line 23. WO 95/15653 does not disclose, among other things, identifying a program from among a plurality of programs simultaneously broadcast in a broadcast channel or addressing the problems of metering digital broadcasts.

WO 99/62260 is a related patent of Massetti '299, which is currently the subject of an interference request submitted by the applicants with respect to the claimed subject matter of the above-identified new application.

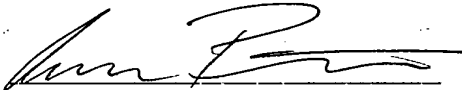
CONCLUSION

In summary, the applicants respectfully request that this application be granted special status for examination under 37 C.F.R. §1.102 and M.P.E.P. §708.02 (VIII).

Respectfully submitted,

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